

Claims

1. A multifunctional pushbutton switch with a plurality of pushbutton
5 switching units having pushbutton surfaces that are close to each other in a
common operating surface, especially for a vehicle steering wheel, with a
common switch housing in which actuation tappets of the pushbutton switching
units are movably guided, and a cap mounted onto the switch housing the cap
being made by means of a two-component injection-molding technique of a
10 relatively rigid plastic frame with a cutout window whose shape and size
correspond to the circumference of a pushbutton surface and of a silicone
membrane stretched over the window.

2. The multifunctional pushbutton switch according to Claim 1, wherein
guide walls of the switch housing extend all the way to the inner surface of the
15 silicone membrane between the actuation tappets.

3. The multifunctional pushbutton switch according to Claim 1, wherein the
actuation tappets are pressed resiliently against the inner surface of the silicone
membrane and are retained by stop members in their unactuated resting positions.

4. The multifunctional pushbutton switch according to Claim 3, wherein the
20 stop members are formed by projections that are molded onto the actuation tap-
pets and that interact with abutment surfaces on the housing that face away from
the silicone membrane.

5. The multifunctional pushbutton switch according to claim 1, wherein the
shared operating surface formed by the outer surface of the silicone membrane has
25 an altogether convex curvature.

6. The multifunctional pushbutton switch according to claim 1, wherein the
actuation tappets have a curvature or indentation that can be felt through the

silicone membrane and that is located on the operating surface that lies against the inner surface of the silicone membrane.

7. The multifunctional pushbutton switch according to claim 1, wherein the plastic frame and the silicone membrane are joined with an inter-material bond.

- 5 8. The multifunctional pushbutton switch according to Claim 7, wherein the silicone membrane engages around the outer circumference of the plastic frame with a shape fit.